

D&D Subgroup Highlights
April 8, 1997

Technology Deployment Initiative (TDI) Preproposals

Jim Goodenough stated that BHI is working on putting together two preproposals: one at F-Reactor to deploy C-Reactor demonstrated equipment/techniques and characterization of the U-Plant canyon facility. Wayne Green will review the four preproposals that FDH is putting together. The CORPEX decontamination technology preproposal was dropped because it was seen as still being in the demonstration phase and not yet ready for deployment. One-page preproposal write-ups are due to Jaki Upton by noon on Friday, April 11 in order to be sent out to all of the STCG Management Council members prior to the May 16 meeting. At the meeting the preproposals will be discussed with the members to determine if there are any issues to be resolved or dealt with. DOE-RL will make the final selection as to which of the preproposals will be further developed into full, 25-page TDI proposals. Rick Gonzalez stated that some of these proposals, CO₂ decon in particular, may be able to be funded out of ROI funds. He thought there was still more than \$1 million left of ROI funds.

Wayne Green reviewed the three-page preproposal that was distributed to all subgroup members dealing with glove port monitoring. This proposal is to purchase a portable NDA system to use in PFP deactivation activities. The use of this portable unit would eliminate the need to seal out and transport the samples to a separate place for NDA. This technology would help address one of Hanford's highest D&D needs. Rocky Flats has also expressed an interest in using this technology and we would work with them on obtaining the funding required.

The second TDI preproposal from FDH was for remote characterization of high radiation areas. This technology is a portable radiation mapping system that uses a gamma camera with real-time response to produce a digitized image of scanned areas showing actual radiation fields and dose rates. The initial deployment of this system would be in the B-Plant canyon with application in the 324 and 327 Buildings later. The BHI U-Plant proposal also contains a gamma camera technology. It was recommended that FDH and BHI work together on this TDI proposal as a multiple-site approach would be stronger. In addition, other DOE sites, such as SRS, are being contacted to ascertain their interest in joining in on the proposal. The DNFSB has been concerned about the lack of characterization data and this technology would help alleviate this concern. The BHI U-Plant proposal deals with alpha and beta radiation monitoring not just gamma but the FDH proposal is only focused on gamma. The cost/benefit numbers for the FDH proposal need to be examined more closely, especially the schedule reduction numbers.

The third FDH TDI preproposal discussed was the laser cutting technology deployment. This proposal is to purchase a trailer-mounted laser system to safely and cost-effectively remove and size-reduce a variety of piping, equipment and materials in a radiological environment. There are a number of other DOE sites also interested in this technology and FDH needs to talk to BHI about other uses on the Hanford site. As part of the laser demonstration now ongoing, the Army Corp of Engineers is validating the costs for operating the laser system. A question was raised as to whether it would be possible to obtain the Corp's methodology for life-cycle costing. Rick Gonzalez wants to see more details on the cost of this new laser unit that is higher powered.

Rick also wants to know if the risks involved in using this laser unit will be discussed. In the current laser demo, a six-ton crane is now scheduled to be cut up next week. This will be video-taped for future viewing.

The fourth FDH TDI preproposal being developed is for CO₂ pellet blasting equipment. This would be used to clean the WESF hot cells. Rick said he would prefer that FDH buy one unit now rather than wait for TDI funding. The CO₂ pellet blasting unit could be used at many places on-site as well as at other DOE sites in the complex. The cost and savings numbers still need to be validated and the NOC (permit) application needs to be signed off also to allow the use of this equipment.

C-Reactor Update

Six of the demonstrations were done by the end of March. Two-page fact sheets are being written for each of these demos. There will be six more demos done in the next six months. There will be an international D&D Symposium held in Miami at the end of November and Hanford will be part of it. Dick Baker (DOE) from Chicago, who is the CP-5 project manager, will be in town to talk about CP-5 technologies on April 17. A meeting time and place will be set up and all subgroup members are invited to attend. A C-Reactor tour may be scheduled on May 6 for the subgroup members. The members will be polled as to interest and availability for the tour.

Meeting Attendees

Gary Ballew (PREC)
Robbin Duncan (BWHC)
Greg Eidam (BHI)
Rick Gonzalez (DOE-RL)
Jim Goodenough (DOE-RL)
Wayne Green (FDH)
Jim Jarrett (PNNL)
Bob Julian (Ecology)
Gerry McCormick (BWHC)
Keith Pauley (PNNL)
Jackie Vander Veen (FDH)
Steve Weakley (PNNL)